



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0196; Project Identifier 2018-SW-021-AD; Amendment 39-21571; AD 2021-11-09]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters. This AD was prompted by an analysis of the main rotor (M/R) blade loop area. This AD requires repetitive inspections of certain M/R blade thimble areas and corrective actions if necessary, as specified in a European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, which is incorporated by reference (IBR). The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For EASA material in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; internet www.easa.europa.eu. You may find this material on the EASA website at

<https://ad.easa.europa.eu>. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0196.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0196; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the EASA AD, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC, 20590.

FOR FURTHER INFORMATION CONTACT: Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA; telephone (206) 231-3218; email kathleen.arrigotti@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA, which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2018-0061, dated March 20, 2018 (EASA AD 2018-0061), to correct an unsafe condition for Airbus Helicopters Deutschland GmbH (AHD) (formerly Eurocopter Deutschland GmbH, Eurocopter Hubschrauber GmbH, Messerschmitt-Bölkow-Blohm GmbH), Airbus Helicopters Inc. (formerly American Eurocopter LLC) Model MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2, and MBB-BK117 C-1 helicopters, all serial numbers.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Deutschland GmbH Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters with an “affected ‘angle 0’ parts” or “affected ‘angle 1’ parts” installed, as identified in EASA AD 2018-0061. The NPRM published in the *Federal Register* on March 26, 2021 (86 FR 16121). The NPRM was prompted by new test results from an analysis of the M/R blade loop area, which revealed that certain M/R blade thimbles require reduced inspection intervals. The NPRM proposed to require repetitive inspections of certain M/R blade thimble areas and corrective actions if necessary, as specified in EASA AD 2018-0061. The FAA is issuing this AD to address composite failure of the M/R blades, resulting in loss of control of the helicopter. See EASA AD 2018-0061 for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed.

Related Service Information under 1 CFR Part 51

EASA AD 2018-0061 specifies compliance intervals to repetitively inspect certain M/R blades, with a blade sweep angle of 1 degree, for cracks and resin chippings in the area of the greater thimble radius and corrective actions, if there is a crack or anomaly. EASA AD 2018-0061 also specifies compliance intervals to repetitively inspect certain M/R blades, with a blade sweep angle of 0 degrees, for cracks and bulging in the teflon foil in the area of the greater thimble radius and corrective actions, if there is a

crack or bulge. Corrective actions include dispatching the M/R blades to an authorized repair station, as required.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and the EASA AD

EASA AD 2018-0061 applies to Model MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2 and MBB-BK117 C-1 helicopters, whereas this AD applies to Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters with certain M/R blades installed instead. The service information required by EASA AD 2018-0061 requires accomplishment of certain corrective action by “ECD” or an authorized service or repair station, whereas this AD requires performing the corrective action in accordance with FAA-approved procedures instead. EASA AD 2018-0061 requires revising the Aircraft Maintenance Program (AMP), whereas this AD does not. EASA AD 2018-0061 allows a tolerance to compliance times, whereas this AD does not.

Costs of Compliance

The FAA estimates that this AD affects 216 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Inspecting an M/R blade thimble area takes about 1 work-hour for an estimated cost of about \$85 per M/R blade thimble, per inspection cycle.

Repairing or replacing an M/R blade takes up to about 20 work-hours and parts cost up to about \$23,100 for an estimated cost of up to \$24,800 per blade.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-11-09 **Airbus Helicopters Deutschland GmbH**: Amendment 39-21571; Docket No. FAA-2021-0196; Project Identifier 2018-SW-021-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH Model MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters, certificated in any category, with an “affected ‘angle 0’ parts” or “affected ‘angle 1’ parts” installed, as identified in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2018-0061, dated March 20, 2018 (EASA AD 2018-0061).

(d) Subject

Joint Aircraft System Component (JASC) Code: 6200, Main Rotor System.

(e) Reason

This AD was prompted by new test results from a composite analysis of the main rotor (M/R) blade loop area, which revealed that certain M/R blade thimbles require reduced inspection intervals. The FAA is issuing this AD to address composite failure of an M/R blade, which if not addressed could result in subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2018-0061.

(h) Exceptions to EASA AD 2018-0061

(1) Where EASA AD 2018-0061 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2018-0061 refers to flight hours, this AD requires using hours time-in-service (TIS).

(3) Where Table 1, Table 2, and Note 2 of EASA AD 2018-0061 specify inspection thresholds, intervals, and a non-cumulative compliance time tolerance of 10% for certain required compliance times, this AD requires accomplishing those requirements, as follows:

(i) For helicopters with an “affected ‘angle 0’ parts,” the compliance time is before accumulating 660 total hours TIS on the affected part or within 100 hours TIS after the effective date of this AD, whichever occurs later, and without accumulating 1,600 total hours TIS on the affected part. Thereafter, the compliance time is at intervals not to exceed 330 hours TIS.

(ii) For helicopters with an “affected ‘angle 1’ parts,” the compliance time is before accumulating 110 total hours TIS on the affected part or within 50 hours TIS after the effective date of this AD, whichever occurs later, and without accumulating 950 total hours TIS on the affected part. Thereafter, the compliance time is at intervals not to exceed 110 hours TIS.

(iii) For helicopters specified in paragraph (c) of this AD, Note 1 of EASA AD 2018-0061 specifies accumulated FH as, “Unless otherwise specified, the FH specified in Table 2 of this AD are those accumulated since the previous M/R blade thimble inspection.” This AD requires intervals thereafter to be accumulated since

accomplishment of paragraph (g) of this AD.

(4) While paragraph (5) and Note 3 of EASA AD 2018-0061 specify revising the Aircraft Maintenance Program (AMP), this AD does not require this action.

(5) Where the service information referenced in EASA AD 2018-0061 specifies accomplishment of certain corrective action by “ECD” or an authorized service or repair station, this AD requires the corrective actions to be performed by a qualified mechanic.

(6) Where the service information referenced in EASA AD 2018-0061 specifies contacting “ECD” or an authorized service or repair station, this AD requires performing the corrective action in accordance with FAA-approved procedures.

(7) The “Remarks” section of EASA AD 2018-0061 does not apply to this AD.

(i) Alternative Methods of Compliance (AMOCs):

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

For more information about this AD, contact Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA; telephone (206) 231-3218; email kathleen.arrigotti@faa.gov.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) European Aviation Safety Agency (EASA) AD 2018-0061, dated March 20, 2018.

(ii) [Reserved]

(3) For EASA AD 2018-0061, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; internet www.easa.europa.eu. You may find this material on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 15, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-11810 Filed: 6/4/2021 8:45 am; Publication Date: 6/7/2021]